



MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



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Updates of Interest:

- Alana's Foundation's annual fundraiser is August 6! Check out their [website](#) for more information.
- The 4th annual Flu Webinar hosted by MDHHS and MSU is August 26 from 12-1 PM! More info to come.

Influenza Surveillance Report for the Week Ending July 11, 2015

Michigan Disease Surveillance System

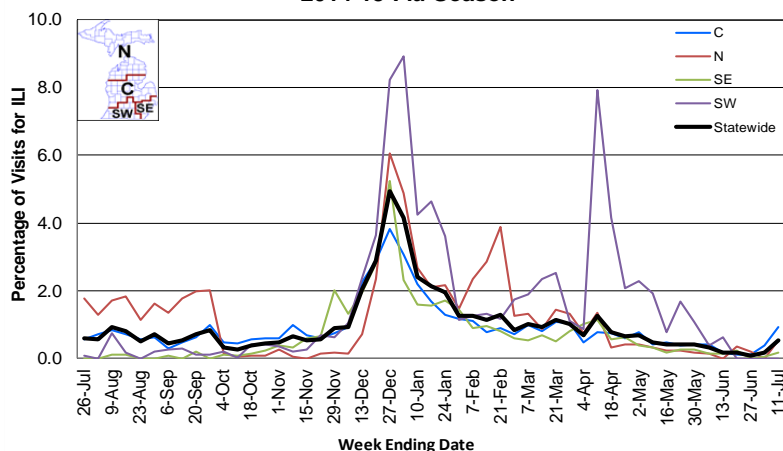
MDSS influenza data indicated that compared to levels from the previous week, aggregate and individual reports decreased slightly. Aggregate reports are slightly lower while individual reports are similar to levels seen during the same time period last year.

Emergency Department Surveillance

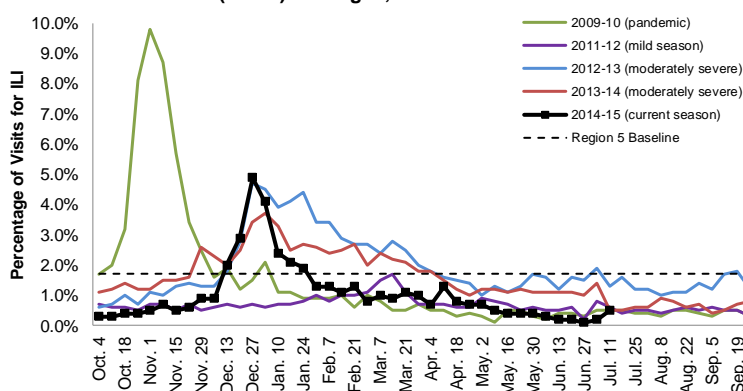
Compared to levels from the week prior, emergency department visits from constitutional complaints remained the same while respiratory complaints decreased. Levels of constitutional complaints are slightly lower while levels of respiratory complaints are lower than levels seen during the same time period last year.

- 4 constitutional alerts (2SW, 2C)
- 1 respiratory alert (1SE)

**Percentage of Visits for Influenza-like Illness (ILI)
Reported by Sentinel Providers, Statewide and Regions
2014-15 Flu Season**



**Percentage of Visits for Influenza-like Illness (ILI) Reported by
the US Outpatient Influenza-like Illness Surveillance Network
(ILINet): Michigan, Select Seasons**



Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 0.5% overall; this is below the regional baseline (1.7%). A total of 31 patient visits due to ILI were reported out of 5,817 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (20 total):

- C (5)
- N (2)
- SE (11)
- SW (2)

Become a Sentinel Provider!

As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Stefanie DeVita (devitas1@michigan.gov) for more information.

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Hospital Surveillance

The CDC Influenza Hospitalization Surveillance Project provides population-based rates of hospitalization due to severe influenza illness through active surveillance and chart review of lab-confirmed cases, from Oct. 1, 2014 – Apr. 30, 2015, for Clinton, Eaton, Genesee, and Ingham counties. The cumulative total during the reporting period was 88 pediatric hospitalizations (45.6 per 100,000 population) and 374 adult hospitalizations (54.6 per 100,000) within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 9 hospitals (C, SE & SW) reported. Results are listed in the table below. Additional hospitals are welcome to join; please contact Seth Eckel at eckels1@michigan.gov.

Age Group	New Flu Hospitalizations Reported	Total 2014-15 Flu Hospitalizations to Date
0-4 years	0	31 (1N, 21C, 4SE, 5SW)
5-17 years	0	33 (28C, 5SE)
18-49 years	0	68 (2N, 12C, 49SE, 5SW)
50-64 years	0	130 (3N, 14C, 99SE, 14SW)
65 years & older	0	529 (20N, 19C, 435SE, 55SW)
Total	0	791 (26N, 94C, 592SE, 79SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 1 new positive influenza result: 1 A/H3. A total of 564 positive influenza results have been reported for the 2014-15 season. Influenza results for the 2014-15 season are in the table below.

Respiratory Virus	# Positive Respiratory Virus Results by Region				Total	# Specimens Antigenically Characterized	# Tested for Antiviral Resistance
	C	N	SE	SW			# Resistant / Total # Tested
2009 A/H1N1pdm				1	1		
Influenza A/H3	113	33	99	248	493	15* (3 A/Texas/50/2012-like**, 12 A/Switzerland/9715293/2013-like)	0 / 146
Influenza B	20	6	19	23	68	68 (48 B/Yamagata lineage [3* B/Massachusetts/02/2012-like†, 9* B/Phuket/3073/2013-like††], 17 B/Victoria lineage, 3 inconclusive)	
Influenza A, unsubtypeable	1			1	2		

*Specimens antigenically characterized by CDC; **A/Texas/50/2012 (H3N2) virus is the H3N2 component of the 2014-15 Northern Hemisphere flu vaccine, A/Switzerland/9715293/2013-like is an antigenic variant of the current vaccine virus; †B/Massachusetts/02/2012 virus is the B/Yamagata component of the 2014-15 Northern Hemisphere trivalent and quadrivalent flu vaccines; ††B/Phuket/3073/2013 virus is the B/Yamagata component of the 2015-16 Northern Hemisphere trivalent and quadrivalent flu vaccines.

In addition, 9 sentinel clinical labs (2SE,2SW,5C) reported influenza results. Two labs (C) reported sporadic influenza A activity. No labs reported influenza B activity. Two labs (SW,C) reported sporadic Parainfluenza activity. No labs reported RSV activity. Two labs (SW,C) reported sporadic Adenovirus activity. One lab (C) reported sporadic hMPV activity. Testing volumes remain low.

Influenza Congregate Settings Outbreaks

There was 1 new facility outbreak reported to MDHHS (unknown etiology/no testing done). There have been a total of 154 respiratory facility outbreaks reported to MDHHS for the 2014-15 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
Adult Care Facility		1	2		3
Long-Term Care / Assisted Living Facility	28	12	36	38	114
K-12 School	1		2		3
Daycare				1	1
Unknown / Investigation Pending	16		4	9	29
Healthcare Facility				3	3
Correctional Facility				1	1
Total	45	13	44	52	154

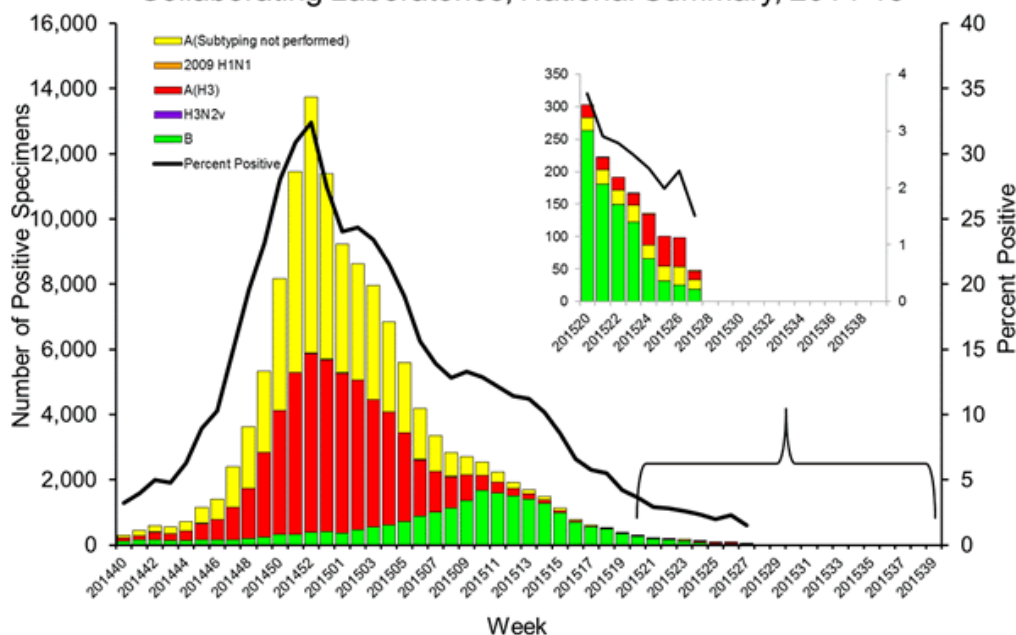
Influenza-associated Pediatric Mortality

No new influenza-associated pediatric deaths were reported to MDHHS. There have been a total of 3 influenza-associated pediatric deaths (1C, 1SE, 1SW) reported to MDHHS for the 2014-15 season.

National: In the United States, 0.9% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.0%. There have been 143 influenza-associated pediatric deaths reported during the 2014-15 season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/. **NOTE:** Influenza surveillance in the U.S. will continue through the summer months with condensed reports available at www.cdc.gov/flu/weekly/; the full FluView resumes on October 16, 2015. [FluView interactive](#) will be updated over the summer months.

International: Globally, influenza activity increased or remained at elevated levels in the Southern Hemisphere. In tropical Asia, flu activity remained at elevated levels, with H1N1 and H3N2 equally dominant. Flu activity remained elevated in South Africa with H1N1, H3N2, and flu B co-circulating. In Australia and New Zealand, flu activity continued to increase. Summary information is available at www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS
Collaborating Laboratories, National Summary, 2014-15





AVIAN INFLUENZA NEWS IN NORTH AMERICA

- USDA: Birds affected remains at more than [48 million](#), last poultry detection reported June 17
- [Ontario's first avian influenza control zone lifted](#)
- No new detections in [Michigan](#)
- Any reports of sick or dead birds should be forwarded immediately to the proper agency:
 - For domestic poultry, contact MDARD:
 - M-F 8AM-5PM, 1-800-292-3939
 - After hours/weekends, 517-373-0440
 - For wildlife (die-off of waterfowl, gulls, or shorebirds), contact DNR:
 - M-F 8AM-5PM, 517-336-5030
 - After hours/weekends, 1-800-292-7800

ACIP JUNE MEETING – SLIDES POSTED

The Advisory Committee on Immunization Practices (ACIP) recently posted the presentation slides from the June 24-25 meeting. You can find the slides [here](#). Flu presentations included high dose vs. standard dose flu vaccine in older adults, proposed recommendations for the 2015-16 flu vaccination season, and more!

2015-16 COLLEGE FLU CHALLENGE

Do you work at a college health clinic and want to increase your students' flu immunization rates? Challenge your rival school to participate in the [2015-16 College Flu Challenge](#)! So far, 11 schools are enrolled! Colleges and universities should enroll at www.surveymonkey.com/s/FluChallenge1516 by July 31. If you have any questions about the Flu Challenge, contact me at DeVitaS1@michigan.gov.

AVIAN INFLUENZA A(H5N1), A(H7N9) NEWS

- CIDRAP: [Feds propose adding H5N1 to HHS select agent list](#)
- [Large flock of gulls killed by H5N1 on China's Qinghai Lake](#)
- [H5N1 strikes more poultry in Nigeria, Ghana](#)
- [Worries rise over H5N1 outbreaks in West Africa](#)
- WHO: [Human infection with avian influenza H7N9 - China](#)
 - 5 new cases, including 3 deaths

Archived editions of FluBytes are available [here](#) and MI FluFocus archives are [here](#).

NAT'L IMMUNIZATION AWARENESS MONTH

Did you know that August is [National Immunization Awareness Month](#)? The National Public Health Information Coalition has a [communications toolkit](#) available online to help you promote the importance of immunizations to certain populations week by week. Here's the schedule for NIAM 2015:

- Aug. 2-8: Preteens and Teens
- Aug. 9-15: Pregnant Women
- Aug. 16-22: Adults
- Aug. 23-29: Infants and Children

INFLUENZA-RELATED JOURNAL ARTICLES

- *mBio*: [An intranasal virus-like particle vaccine broadly protects mice from multiple subtypes of influenza A virus](#)
 - Shown to offer significant protection against variety of flu A viruses in mice
 - Suggests practical strategy to develop 'universal' influenza vaccine
- *Biomaterials*: [Clinical study and stability assessment of a novel transcutaneous influenza vaccination using a dissolving microneedle patch](#)
 - Small human trial, induced good immune response
- *JAMA*: [Effect of varying doses of monovalent H7N9 influenza vaccine with and without ASO3 and MF59 adjuvants on immune response: a randomized clinical trial](#)
 - Both adjuvants increased immune responses to 2 inactivated vaccine doses
 - ASO3 adjuvant induced highest titers
- *MMWR*: [Pertussis and influenza vaccination among insured pregnant women - Wisconsin, 2013-2014](#)

OTHER INFLUENZA-RELATED NEWS

- [GSK starts shipping Fluarix® quadrivalent to U.S. healthcare providers](#)
- [Two more Taiwanese H5N2 outbreaks confirmed](#)
- [Canine influenza found in North Carolina](#)
- [CSL wins European approval to buy Novartis flu vaccine business](#)

FLU WEBSITES

www.michigan.gov/flu
www.cdc.gov/flu
www.flu.gov
<http://vaccine.healthmap.org/>

For questions or to be added to the distribution list, please contact Stefanie DeVita at devitas1@michigan.gov.

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